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(54) Process for acid treating clay for improved filtration.

(57) A method of treating clay with acid to beneficiate the clay for increased capacity of filtration of oil-soluble colorant compounds from oil. The clay is ground to a particle size distribution such that more than 50% by weight of the clay, on a dry basis, passes through a 200 mesh screen and less than 5% by weight of the clay, on a dry basis, is finer than 5 microns. After grinding, the ground clay is directly contacted with an acid solution to form an acid slurry of the clay. The clay acid slurry is agitated for a time sufficient and at a temperature sufficient so that the acid reacts with a portion of the clay and, thereafter, the acid treated clay is separated from the acid solution; the clay then is washed to remove most of the acid solution from the clay; filtered to a liquid content less than about 60% by weight and thereafter dried to a liquid content less than about 20% by weight.



EUROPEAN SEARCH REPORT

Application number

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DOCUMENTS CONSIDERED TO BE RELEVANT					
Category		th indication, where approprant passages	priate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
Y	US-A-1 926 148 * Page 2, line 67 *	(HUBER) 22 - page 3	, line	1	B 01 J 20/12
A				2,3,6	
Y	US-A-2 192 000 * Page 1, right 44 - page 2, r line 8 *	-hand column		1	
A				3,4,7	
A	US-A-1 819 496 * Page 1, line 57; page 1, lin	81 - page 3	, line	1,3,6	TECHNICAL FIELDS SEARCHED (Int CI 4) B 01 J
	The present search report has t	r			
	Place of search THE HAGUE	Date of completion	987	WENI	DLING J.P.
Y: pa do A: ted O: no	CATEGORY OF CITED DOCK rticularly relevant if taken alone rticularly relevant if combined w cument of the same category chnological background in-written disclosure ermediate document	rith another D L	: earlier patent after the filing : document cite : document cite	document, I date ed in the app ed for other	ying the invention but published on, or blication reasons and family, corresponding